

SEQUENCE OF OPERATIONS

1. Operations shall take place in 4 areas with 1 bench in each area.
2. Areas do not represent any specific or equal time period.
3. Operations shall proceed in the numerical order of Areas and in the direction of the arrows shown.
4. As the limit of extraction adjacent to any extraction limit is reached and any stockpiles are removed, the perimeter slopes shall be rehabilitated as outlined on the Progressive Rehabilitation and Final Rehabilitation Plan.

OPERATIONAL NOTES

1. **SETBACKS:** Extraction setbacks shall be 15m along the west licence boundary and 20 metres where shown on the southern boundary adjacent to the woodlot. The setback is 0m along all other boundaries since the applicant owns the adjacent lands.
2. **MAXIMUM DEPTH OF EXTRACTION:** The maximum depth of extraction shall be 232.0m which is 0 to 5m below the existing water table of 232m to 237m. (See Figure 11 in the Whitewater Hydrogeology Ltd. report)
3. **SIDE SLOPES:** Perimeter side slopes shall be created by backfilling with onsite overburden & clean fill. Final perimeter slopes shall be constructed no steeper than 2(horizontal) to 1(vertical). Final slopes shall be spread with a minimum of 10 cm (4 inches) of topsoil with previously stored topsoil and may be seeded with a combination of native grass mixture such as Virginia Wild Rye, Indian Grass, Little Blue Stem and Switch Grass with some wildflower mix (milkweed, aster, tick-trefoil and Black-eyed Susan).
4. **ENTRANCE/EXIT/GATE:** The entrance to this quarry shall be to the applicant's adjacent quarry to the north. From there, trucks shall proceed on the existing quarry haul roads to the existing entrance at Grey County Road #1. A 1.2m gate is installed at the County road entrance and shall be closed when the quarry is not operating.
5. **FENCING:** Post & wire fencing (minimum height 1.2 metres) shall be repaired or installed on the proposed west licence boundary. There shall be no fencing required on the east, north or south boundaries as the applicant owns the adjacent lands. The existing fence on the north boundary shall be removed as operations may require. See "Site Plan Variances from the Operational Standards" on this page. Unfenced boundaries shall be marked with 2m high, highly visible marker posts at corners and at intervals not to exceed 60m. Some posts may be removed to prevent interference with farming operations.
6. **TOPSOIL/OVERBURDEN STORAGE:** Topsoil and overburden will be stripped sequentially and stored separately where required. All topsoil will have any woody vegetation and stone piles removed prior to stripping and all stripping will be done under dry conditions. Stripped topsoil and overburden shall be stored in stockpiles within the extraction area or in the west setback area. Stripped topsoil & overburden shall be graded to stable side slopes and shall be vegetated. The proposed berm shown along the east boundary shall be constructed for noise attenuation if required. See the berm detail on this page.
7. **VEGETATION:** Vegetation shall be maintained on all topsoil berms, stockpiles and rehabilitated areas. Vegetation that dies or is otherwise damaged shall be reseeded or replanted.
8. **STOCKPILES:** Stockpiles of aggregate or stripped materials may be located within 30 metres of the licence boundary, west boundary excepted.
9. **PROCESSING EQUIPMENT:** Equipment to be utilised on this site shall include scrapers, bulldozers, loaders, excavators, drill rigs, crushers, screeners, conveyors and dump trucks. Portable equipment will follow the phasing sequence and will not be located within 30m of the licence boundary.
10. **DUST CONTROL:** Dust control shall be maintained through the application of water when necessary.
11. **NOISE, DUST OR GROUNDWATER INTERFERENCE PROBLEMS:** Should noise, dust or groundwater interference complaints be received, the licensee shall take appropriate measures as deemed necessary by the Ministry of Environment, Conservation and Parks to rectify the problem(s).
12. **SCRAP STORAGE:** Scrap shall be stored in various inconspicuous mobile locations and shall be removed on an ongoing basis.
13. **PETROLEUM STORAGE:** All petroleum storage shall be in above ground containers that meet the requirements of the Technical Standards and Safety Act (as may be amended). Any spills shall be removed and disposed of at a facility approved by the Ministry of Environment, Conservation and Parks. Mobile fuel tanks shall be the engineered, double-tanked variety with vacuum sealed valves. See the Spills Plan on this page.
14. **BUILDINGS:** Any operational buildings or scales and equipment trailers shall be located a minimum of 30m from the west licence boundary.
15. **DRAINAGE:** Water from precipitation shall be directed to the sump area on the adjacent quarry (MNR ID: 5041) and shall be pumped in accordance with MOECC regulations under PTTW: 1864-8EXHST.
16. **HOURS OF OPERATION:** The hours of operation for this site shall be from 7am to 6pm from Monday to Friday and from 8am to noon on Saturday. There shall be no processing on Saturdays.
17. **EXTRACTION AREA:** The area to be extracted is 14.3 hectares.
18. **TONNAGE CONDITION:** The maximum number of tonnes to be removed from this site in any calendar year is 400,000 tonnes. The combined maximum tonnage that is removed from this site and the adjacent licensed HSC quarry shall also not exceed 400,000 tonnes.
19. **CONSULTANT RECOMMENDATIONS:** Consultant recommendations are shown on Drawing 3 of 4: Consultant Recommendations.
20. **BLASTING:** Refer to the Blasting Recommendation show on Drawing 3 of 4: Consultant Recommendations.

SITE PLAN VARIANCES FROM THE OPERATIONAL STANDARDS

1. **STANDARD 5.1** - Fencing shall not be required on the south, east and north licensed boundaries which are adjacent to lands owned by the licensee. Unfenced boundaries shall be marked with 2m high, highly visible marker posts at corners and intervals not to exceed 60m.
2. **STANDARD 5.10.1** - Setbacks have been reduced from 15m to 0m on the north, east and part of the south licensed boundaries (where shown) which are adjacent to lands owned by the licensee.
3. **STANDARD 5.13** - Stockpiling may take place within 30m of the north, south and east licensed boundaries where agreements are in place with the adjacent landowner.

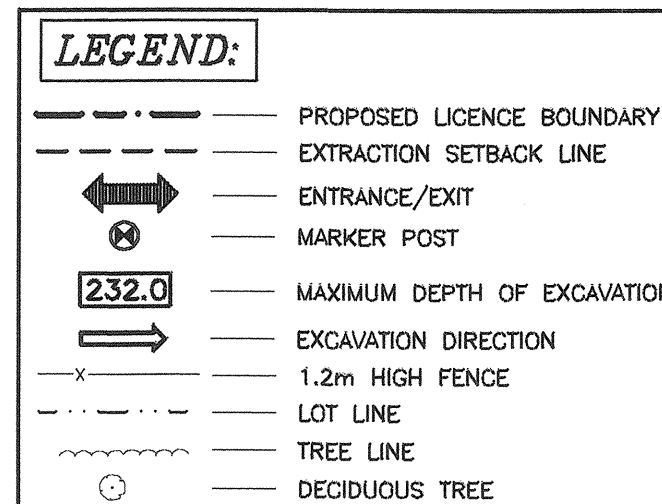
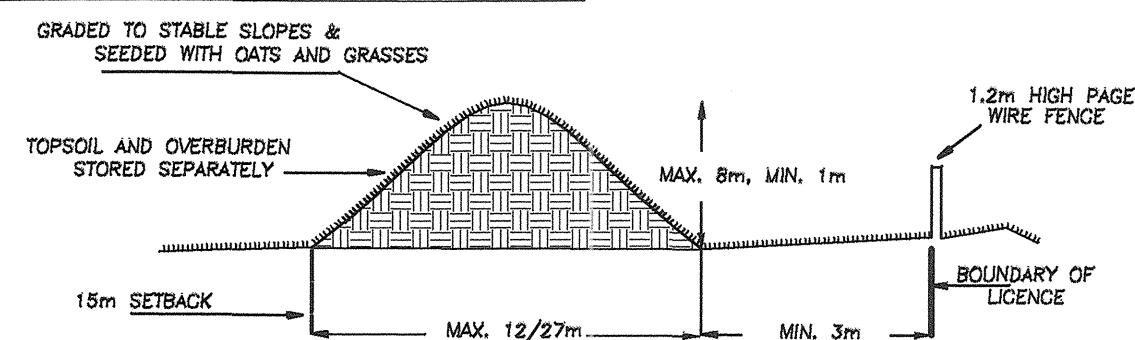
Spills Plan

In case of an accidental spill of petroleum products, the following contingency plan will be activated:

- a) The Ministry of Environment, Conservation and Parks (See address & phone number below) and surrounding landowners will be notified.
- b) For a leakage or spill immediate action will be taken to stop it. At the same time measures will be taken to prevent spreading. These measures may include building a berm or construction of a ditch, for instance.
- c) The quarry operator shall commence recovery procedures by collecting the spilled substance into containers.
- d) The soil in the area affected by the spill or leak shall be removed and disposed of at a location prescribed by the Ministry of Environment, Conservation and Parks.

MECP
 Southwest Regional Office
 733 Exeter Road, 2nd Floor
 London, Ontario, N6E 1L3
 Spills Action Centre: 1-800-268-6060

TYPICAL BERM SECTION nts



HAROLD SUTHERLAND CONSTRUCTION LTD.
 323545 EAST LINTON ROAD
 R.R. #2, KEMBLE, ONTARIO, N0H1S0
SARAWAK QUARRY EXTENSION
 PART LOT 36, CONCESSION 2
 TOWNSHIP OF GEORGIAN BLUFFS (formerly SARAWAK TOWNSHIP)
 COUNTY OF GREY

OPERATIONAL PLAN
 DRAWING 2 of 4

SCALE 1:2000

No.	AMENDMENT	DATE